FunnyCamera

Thanks for your purchase.and this document is for developer. It will introduce you the components of the project,and the important information during development.
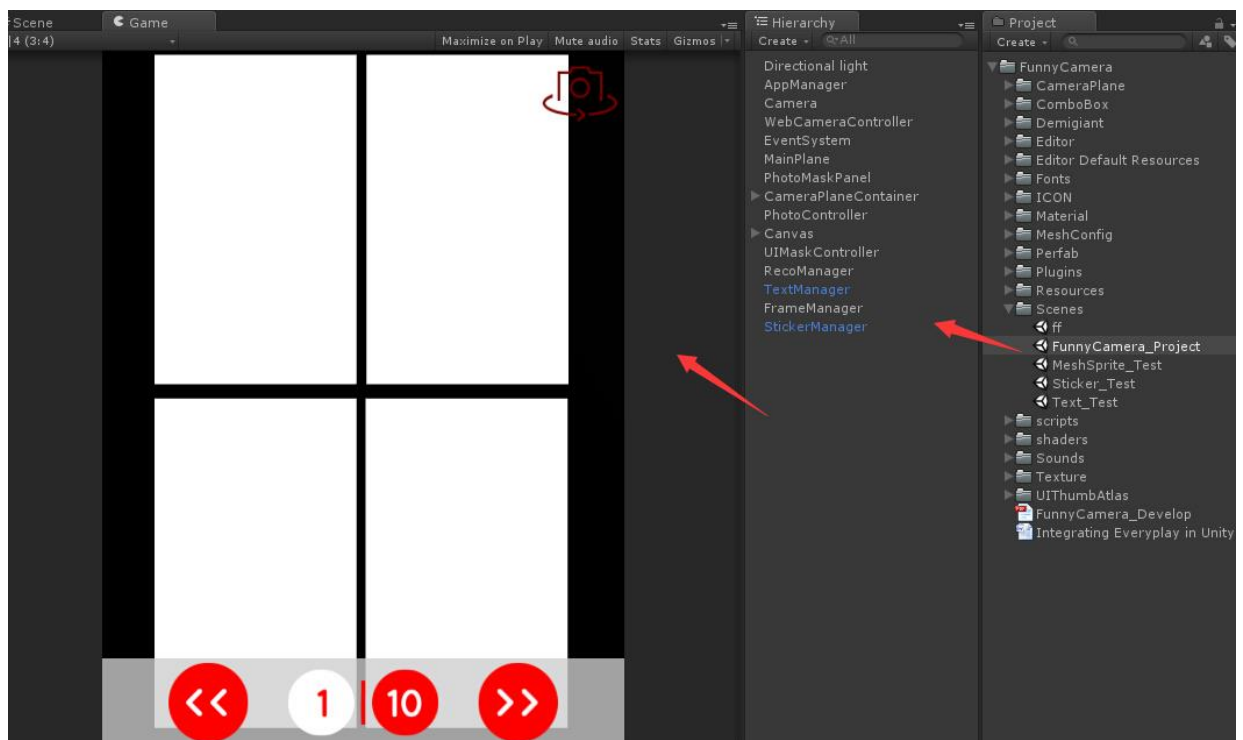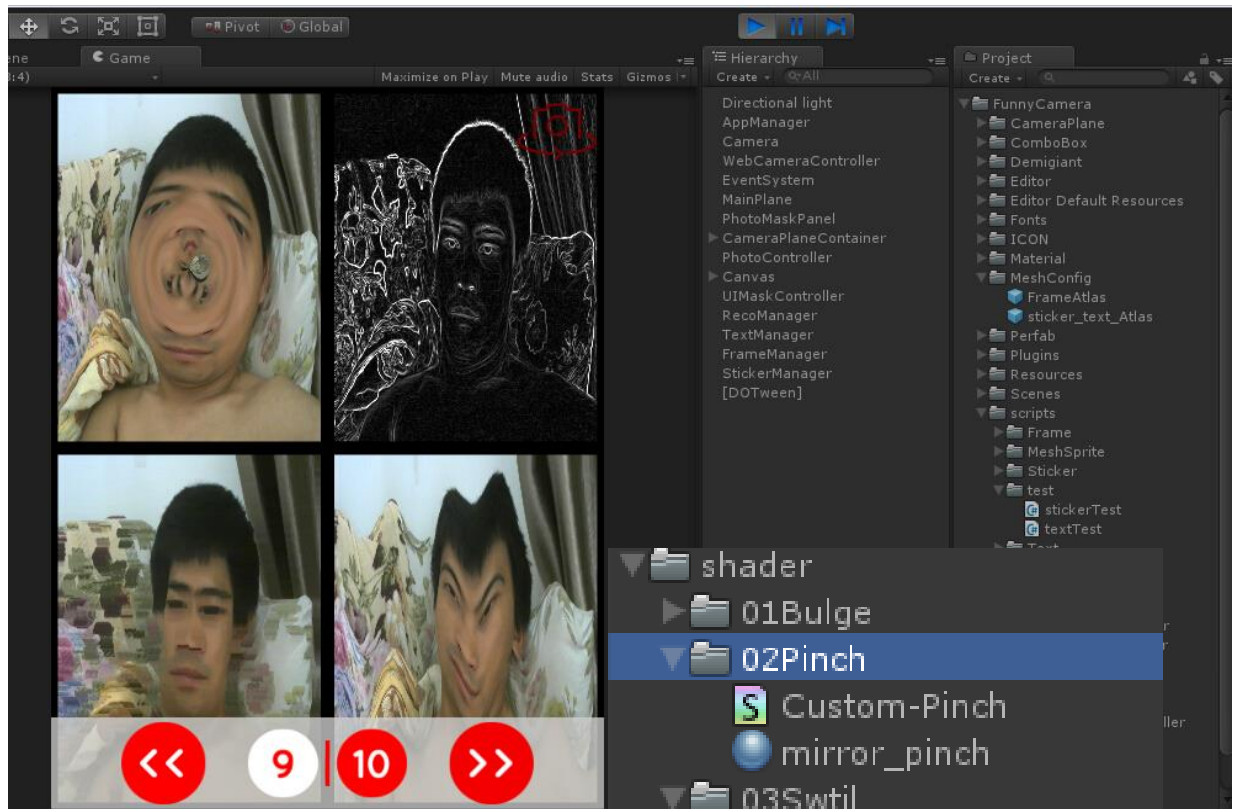
Well, Now We're entering the FunnyCamera.

When you just import the Project from the Asset store,your unity3d editor should like this:

That is right

now you can open the scene of the project named "**FunnyCamera_Project**".and run it with device camera(or usb webcam).

For Developer:

We will introduce several important parts in detail about the project.

(1)filter shaders

(1) In the project,All the funny effects are writed by shader, It works more efficiently than pixel processing.and the source scripts all open. You can see or rewrited in editor.
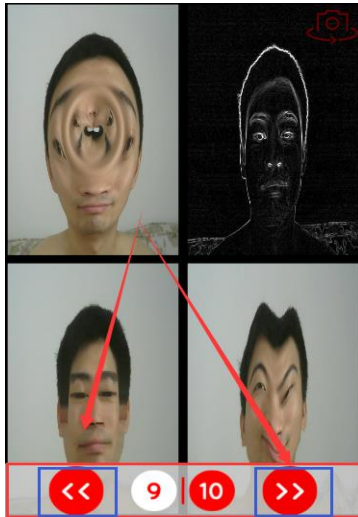
(2) all the filter shaders attach to material,then in the script named "Appmanager.cs",

it have a Array Member variable named "effectMatArr"

```
4  public class AppManager : MonoBehaviour {
5
6      public Material[] effectMatArr;
```
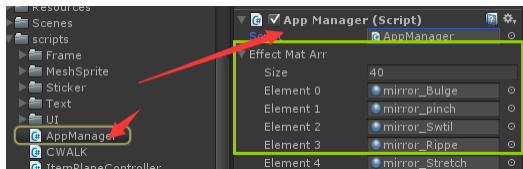
And we would use the Array to Switch shader effect to camera by UI button.(The detailed method is in the "AppManager.cs" script. You can see it detail).


(2)Mesh Sprite Editor

In our project,there is a important plugin about plane mesh editor. the plugin can make different mesh types. for example

(**Default,Nine_Sliced,Tiled_Sliced**),the types of **Nine_Sliced** is **as same as the NGUI Sprite Slice/UGUI Image Sliced type**. and the Tiled_Sliced type is a very perfect tool. we will introduce this editor in detail. Because it will used in the **frame,sticker,text**.

first of all.open the editor in the unity3d menu,like this ,you can choose to create a config file for test or drag into a existed config file.
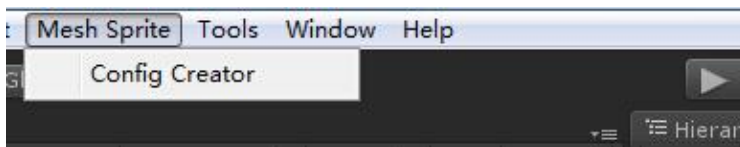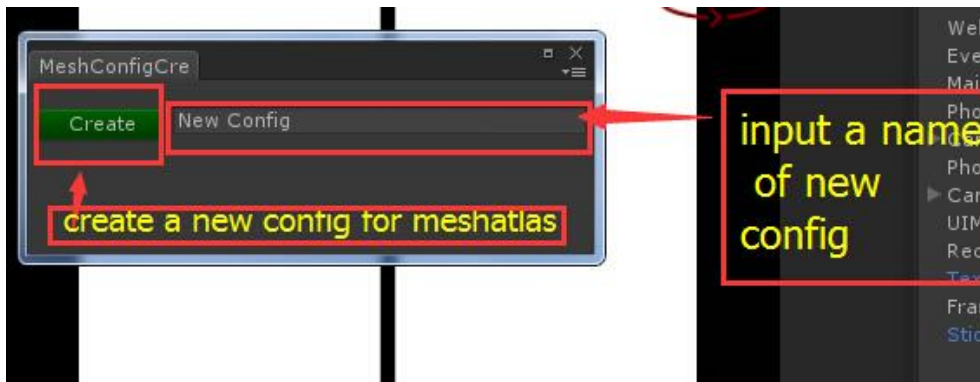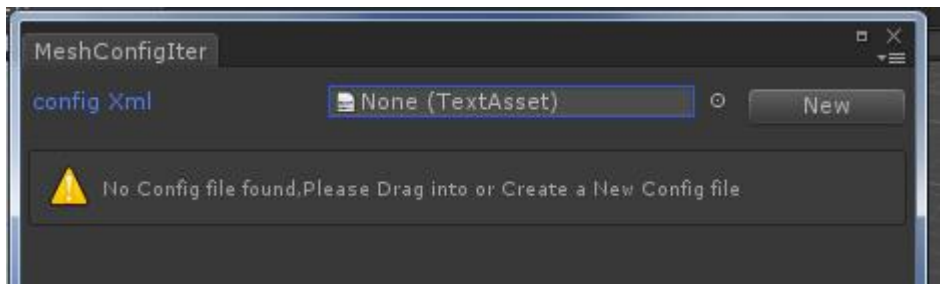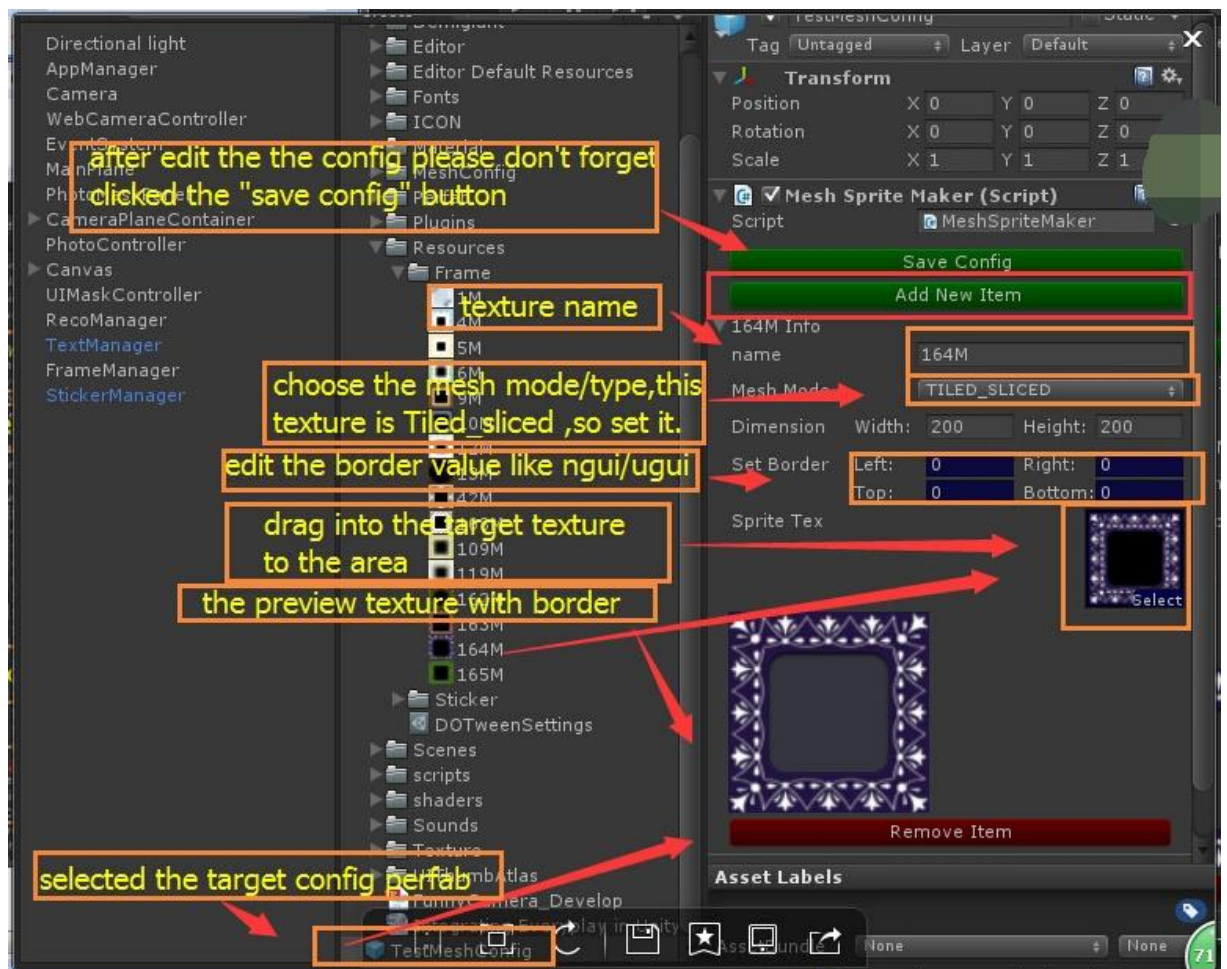
Now you can select the prefab object which you just created and it will show the edit panel in the inspector like this :
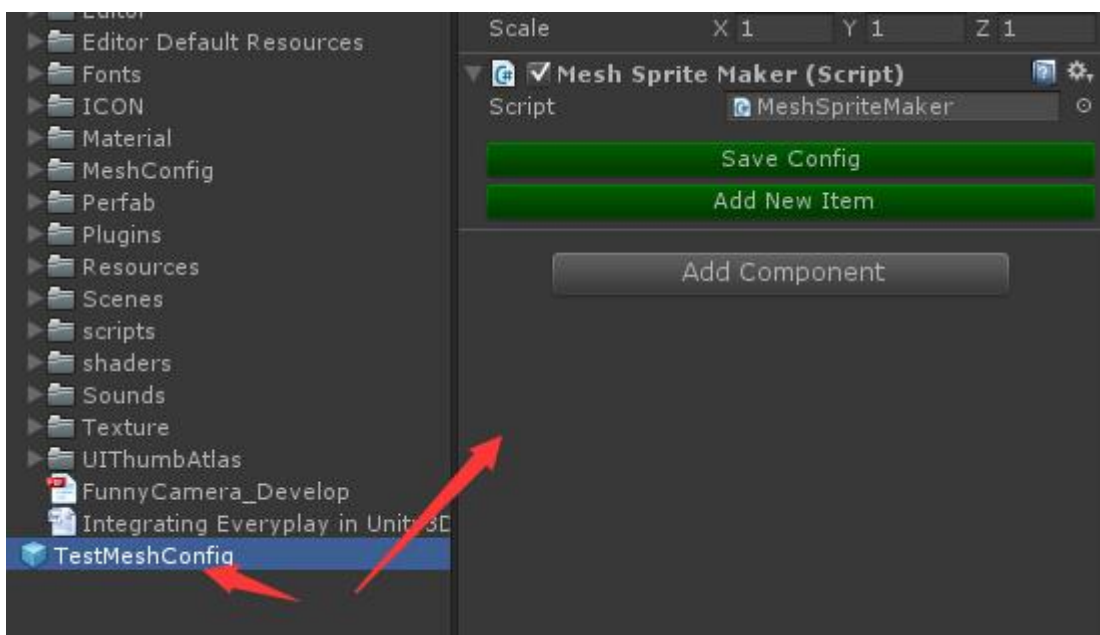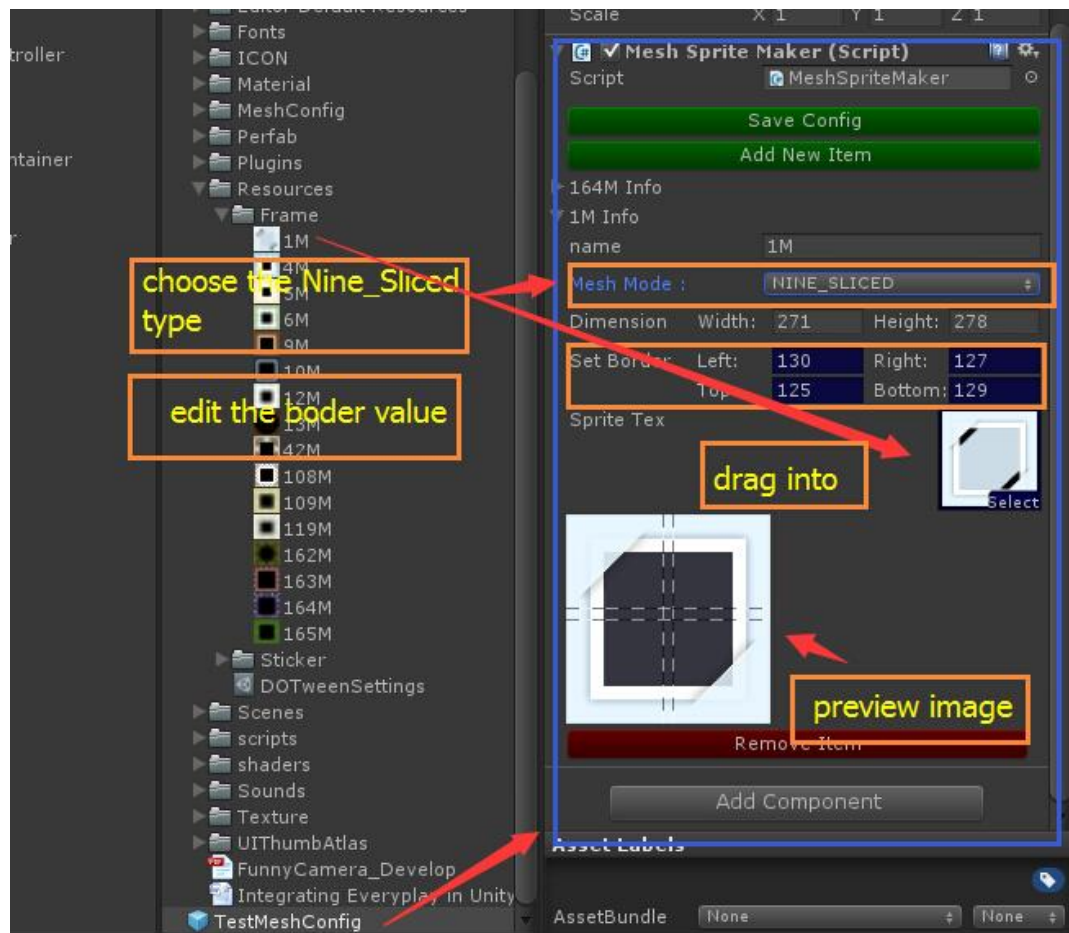

Then ,you can add a new item by "Add new Item" button.

Tiled _Sliced type:(like the ugui image sliced)
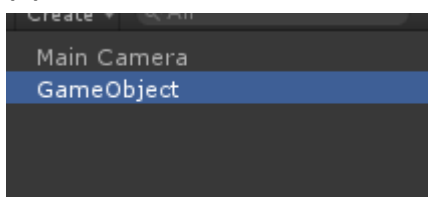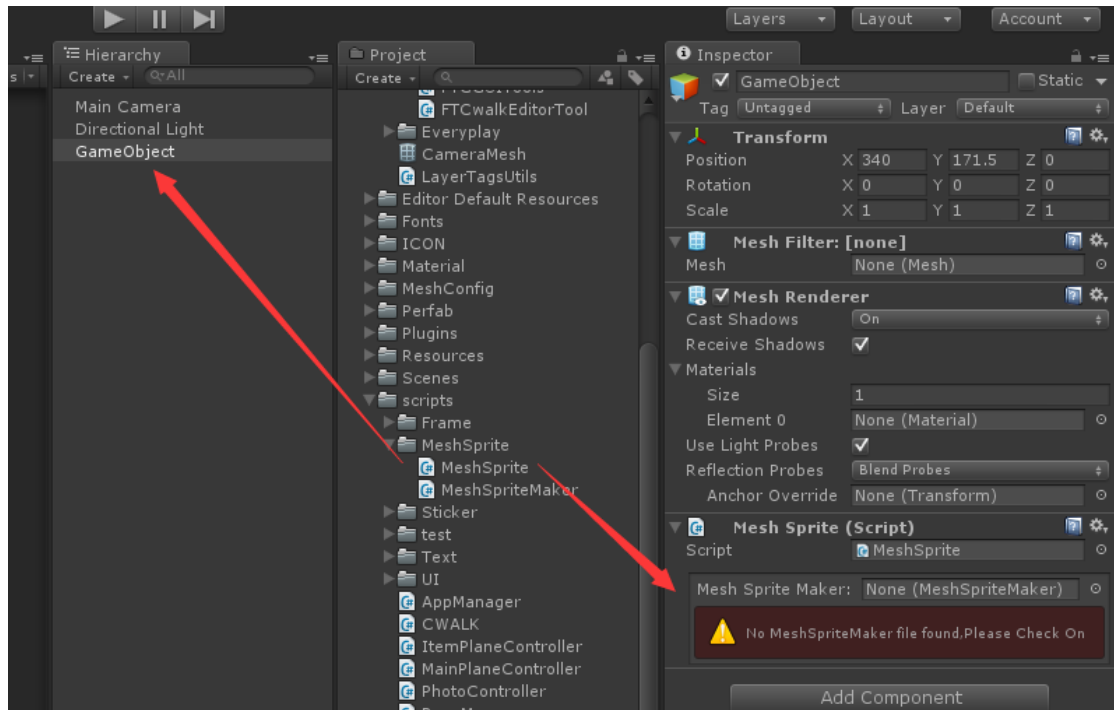
Nine_Sliced type:

After Complete the config file edit.you can test it in you test scene.
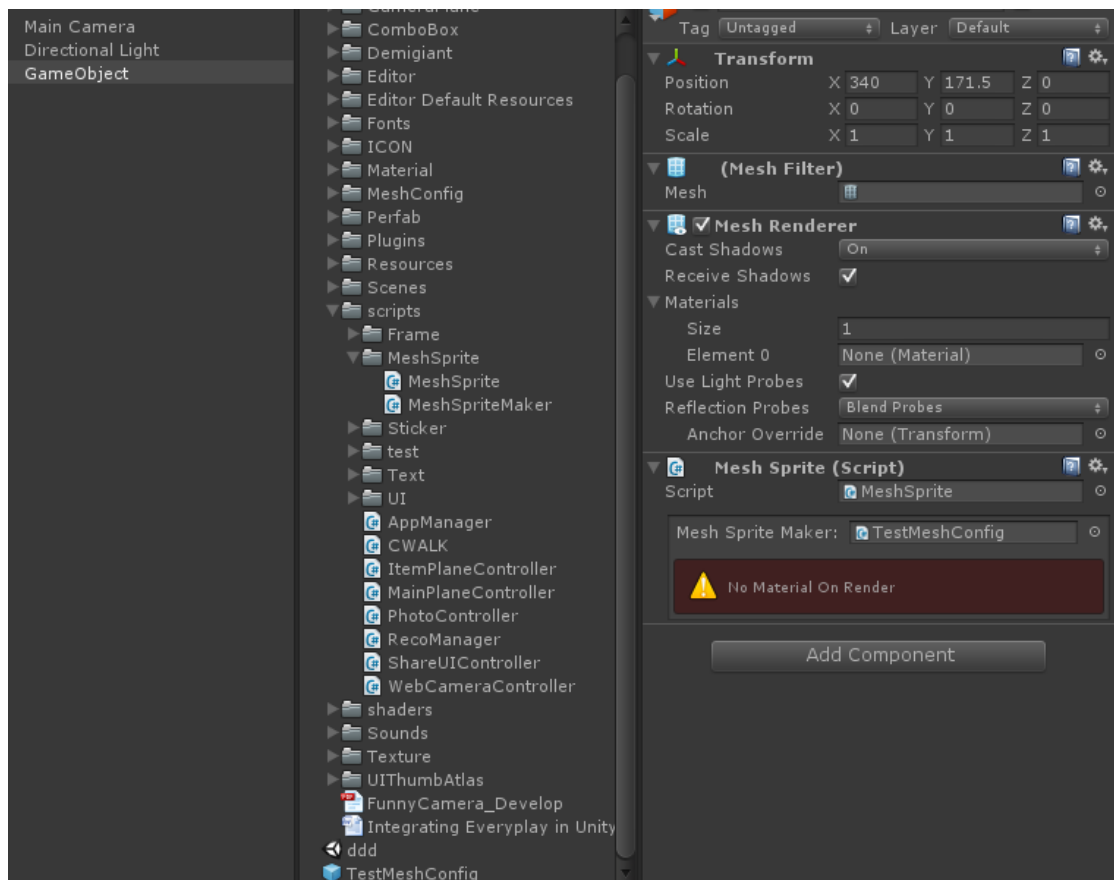
Now ,we will show you the effect.

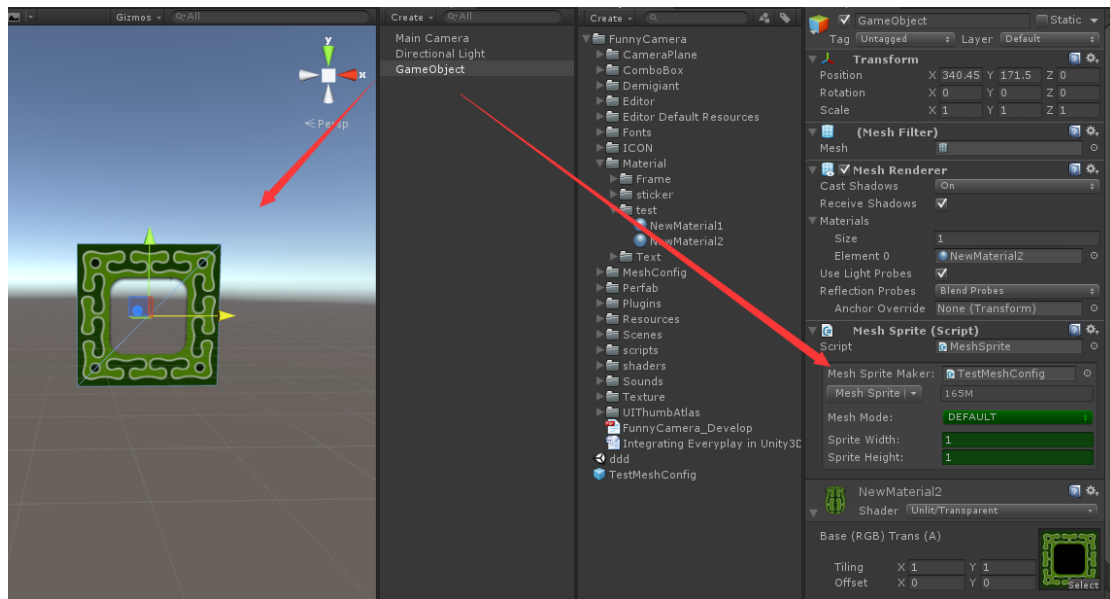**(1) new a scene.and create a emptyobject.**

(2) Attached the script named "MeshSprite.cs".

And then drag the MeshSpriteMaker prefab object file which you just created with Mesh Sprite editor.

And then it will show the waring msg that mesh have no material,so you can new a material or use a existed one.and drag into the Mesh Renderer .

If you meet the tips "material texture is null ",you can clicked the left side button "Mesh Sprite".and it will open a dialog ,it have some textures what you just edit in the mesh sprite editor,like this.
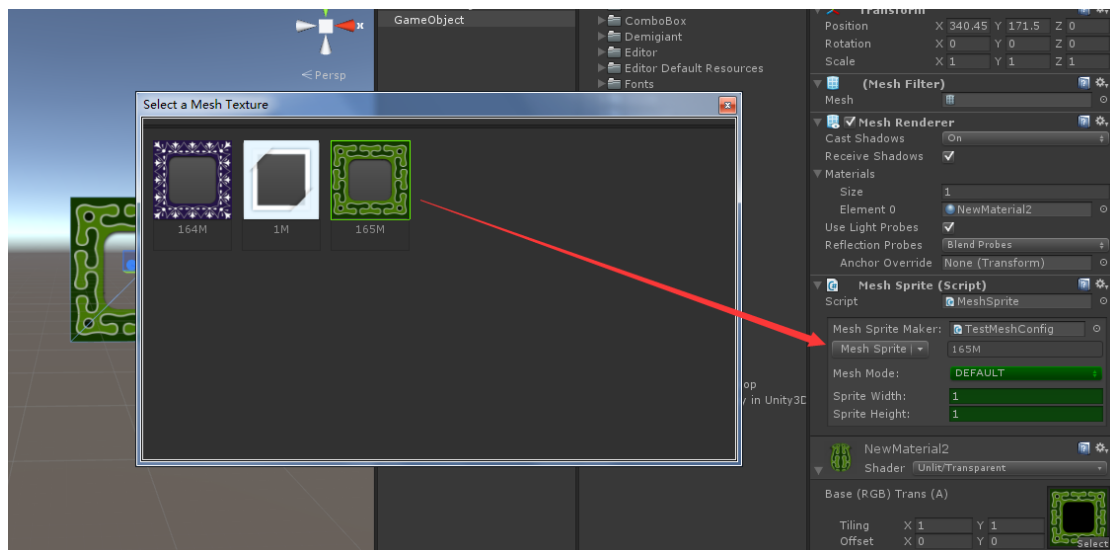
You can choose the one you like.

(3) Change the Mesh Type fit the config setting.

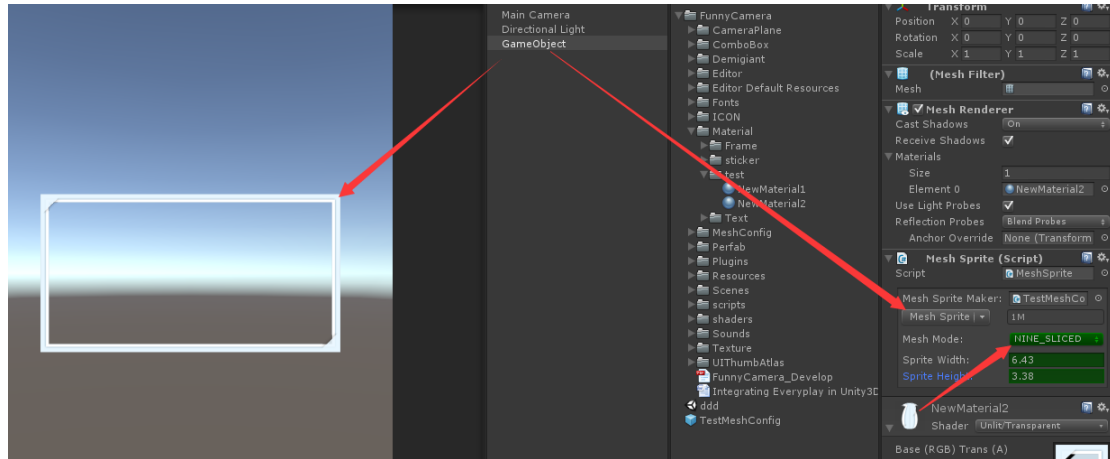**3-1:Nine_Sliced:**

This texture 's type is "Nine_Sliced",so ,you should choose the right one in the combox.if not ,it will be stretched like the above picture .and the below picture is the right effect.

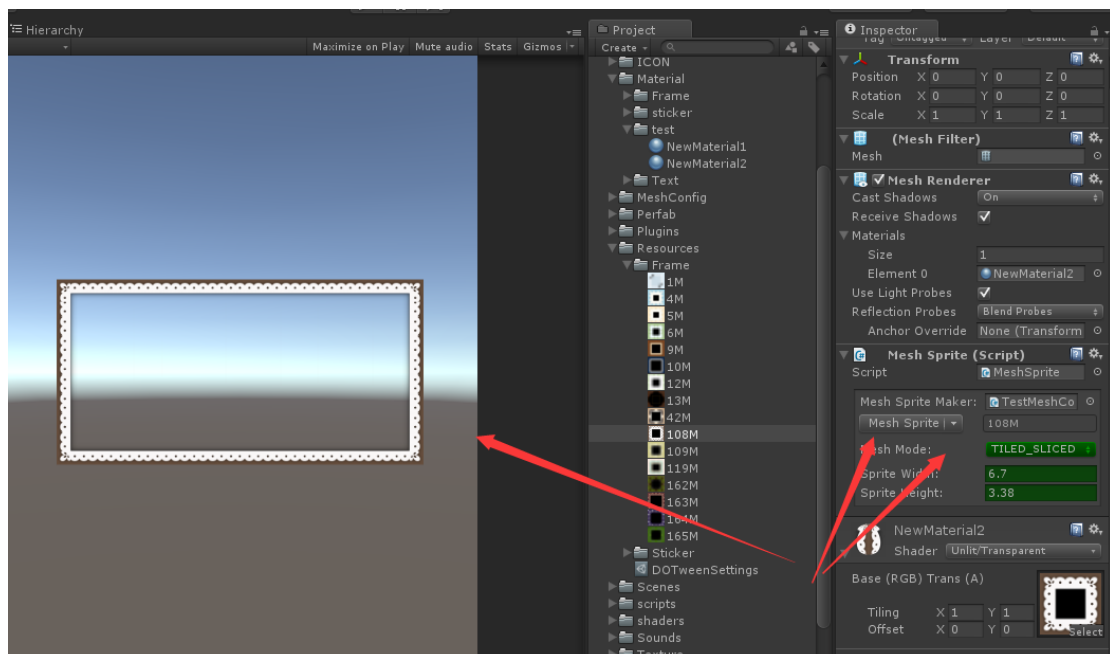Hah,that is right one. This feature will be used on frame ,sticker,and text in our project.

3-2:Tiled_Sliced:

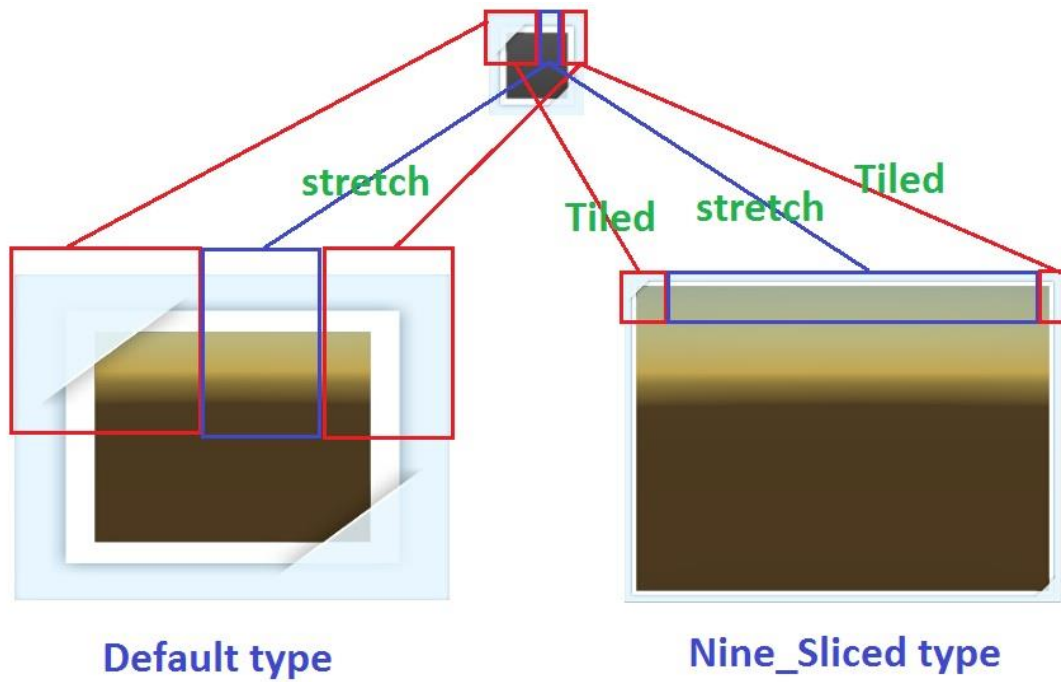There ,we can test the Tiled_sliced feature with the plugin.

If you clicked the Button "Mesh Sprite" and choose this texture .at the same time.you should choose the "mesh mode" to "TILED_SLICED".this is the right effect.

In the end,we will attach a picture to show the change.

Nine_Sliced type:

Default type

Nine_Sliced type

Tiled_Sliced:

Default type

Tiled_sliced type
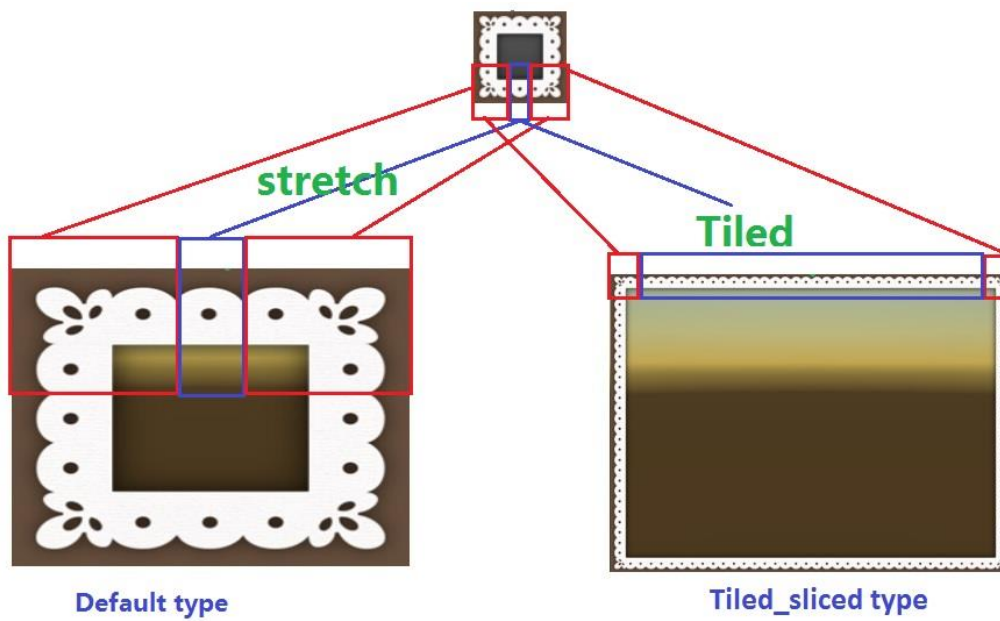
(3)Frame Manager

now,you should open the sample scene "FunnyCamera" int Project.When you clicked the one item of four items in the first page,and the one will fill the screen .so you can take a photo in the moment that you like.

1) UI controller

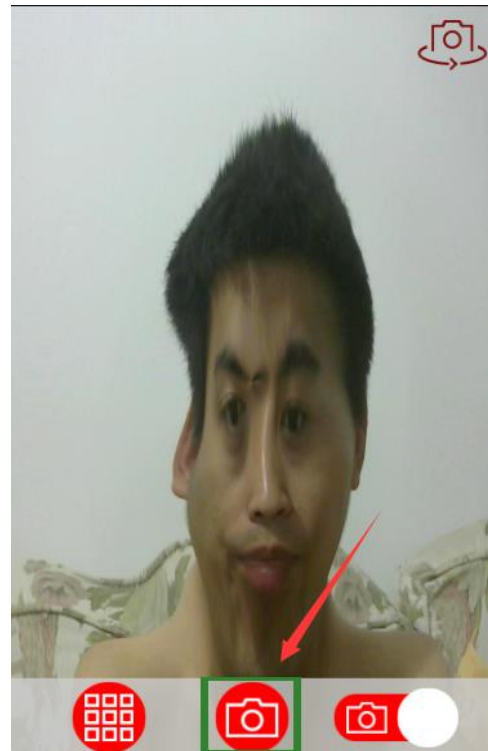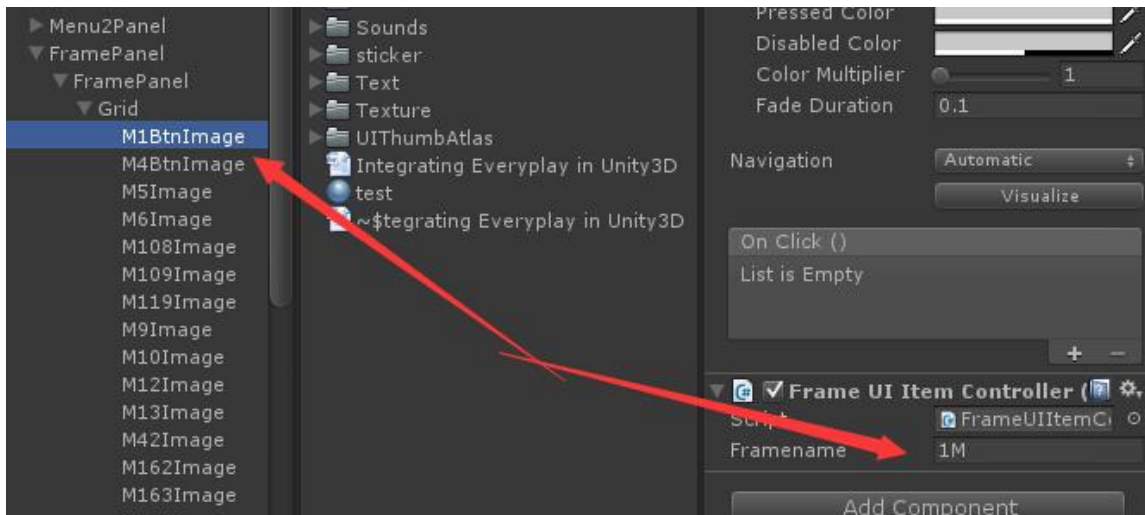To control the change of frame effect,we use the ugui control,there are **scrollRect and mask** component,and have some sub items in it.at the same time ,we have added the "**FrameUIItemController.cs**" to each item, the component has a parameter which is the frame texture's name , because we need use the parameter to control the effect to apply on the photo.

This is the "**FrameUIItemController.cs**" content. the clicked function will call the FrameManager to change the frame effect.

2) Frame logical control

The script named "FrameController.cs" Control the frame effect on the photo ,we attach it to the FrameManager gameobject,at the same time ,we have added the "MeshSprite.cs" (This tool has been introduced in the previous section)

to it.
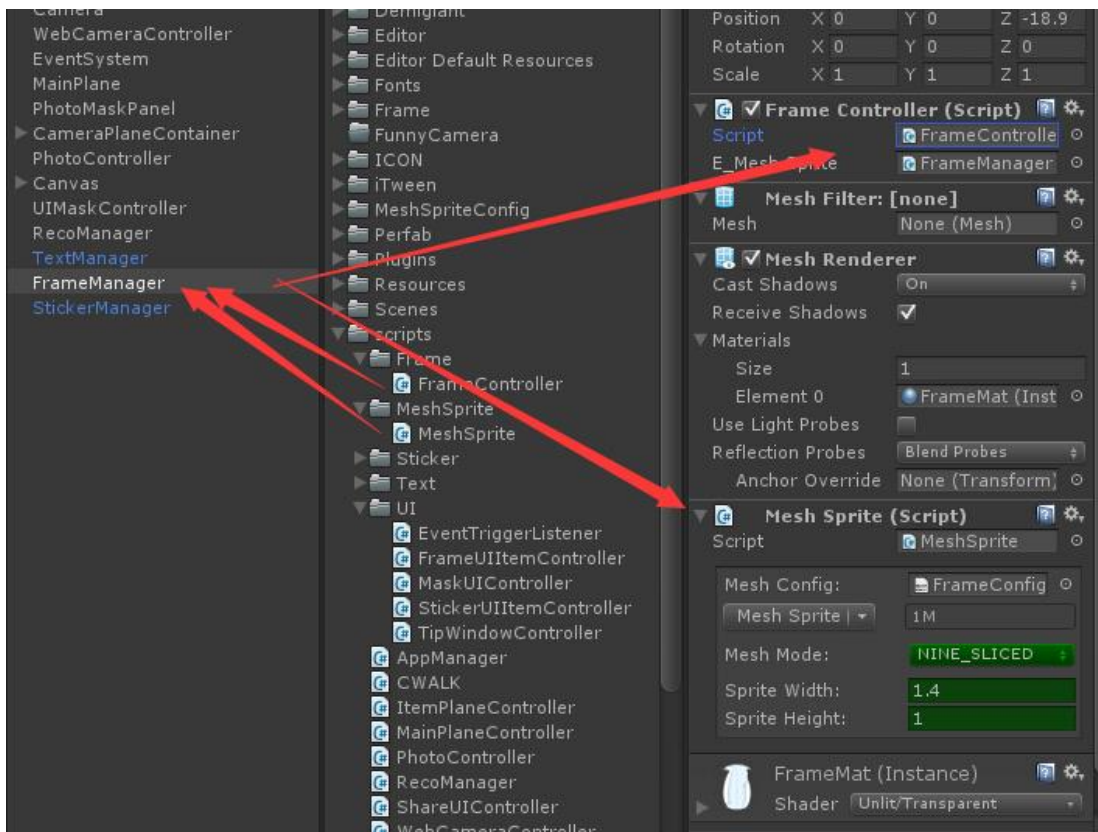
FrameManager.cs

/// Updates the mesh sprite by name.
public void updateMeshSprite(string name)

/// Clears all frame effect
public void ClearAll()

/// Init this frame effect
void init()

you can see the open source scripts in the editor.

(4)Sticker Manager

Ok, Next we will introduce to you about the Sticker effect. There are a lot of similarities with the frame on UIcontrol.use the **scrollrect and mask** too. So , We're going to skip over this part of UI Control.
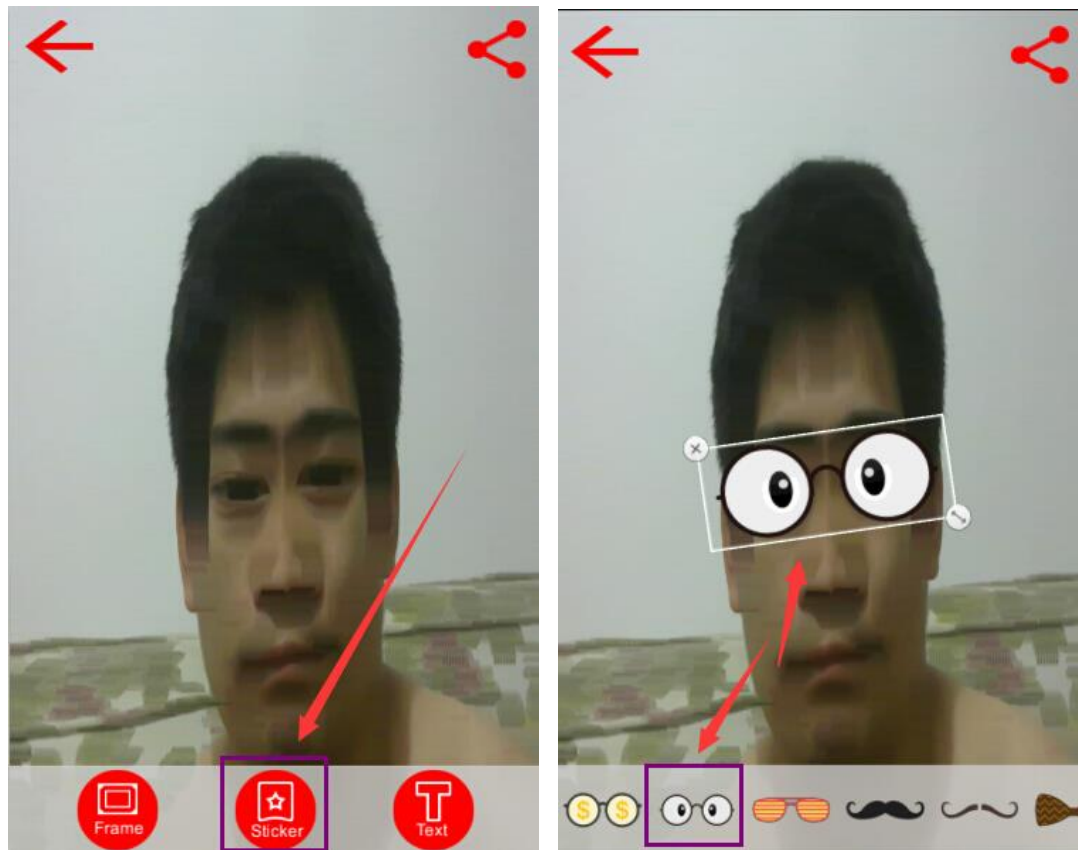
This is the effect of sticker.

(1) Sticker logical control (StickerManager)

The **StickerManager.cs** is very important script,it Instantiates the stickeritem prefab by receiving message from ui menu item. In addition to this,it control the item Activation and non activation,move ,scale,

roation,save to photo.and so on.
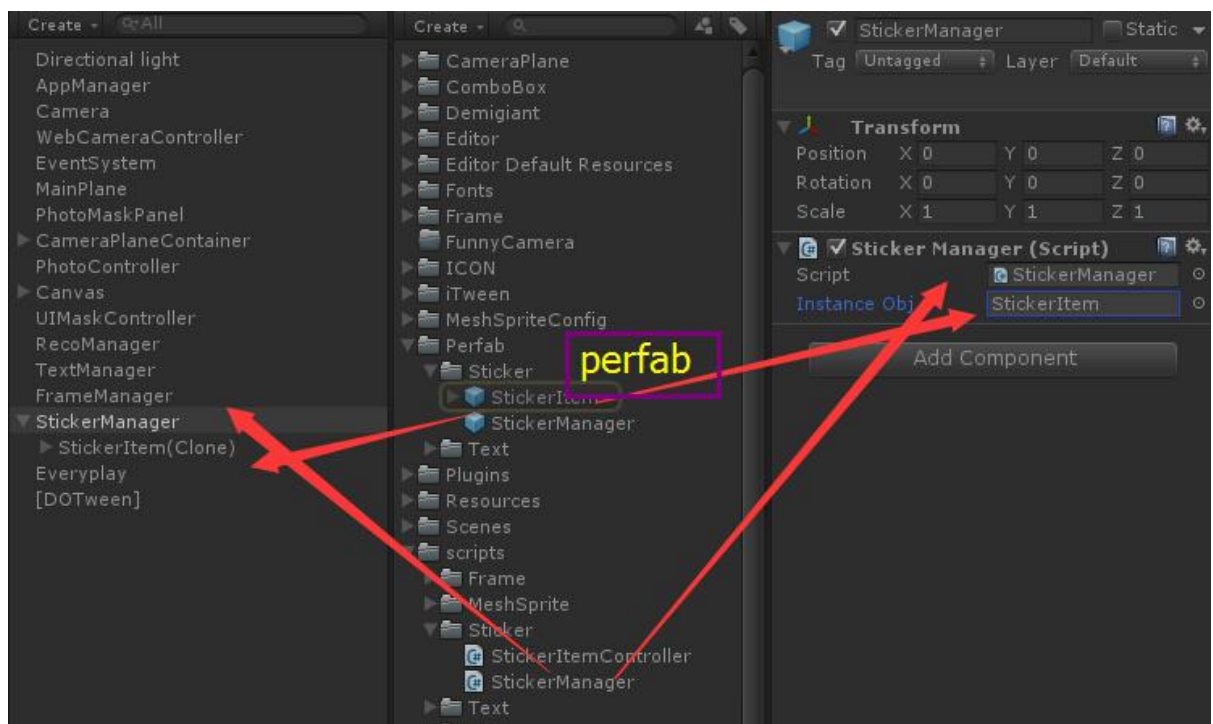
These are the primary functions

/// Sets the item active.
public void setItemActive(GameObject obj);

/// Adds the sticker item to list
public void AddStickerItem(StickerItemController item)

/// Removes the sticker item.
public void RemoveStickerItem(StickerItemController item)

/// Clears all sticker items
public void ClearAll()

/// Creates the item by sticker name
public void CreateItem(string stickerName)

(2) the StickerItem prefab(important)
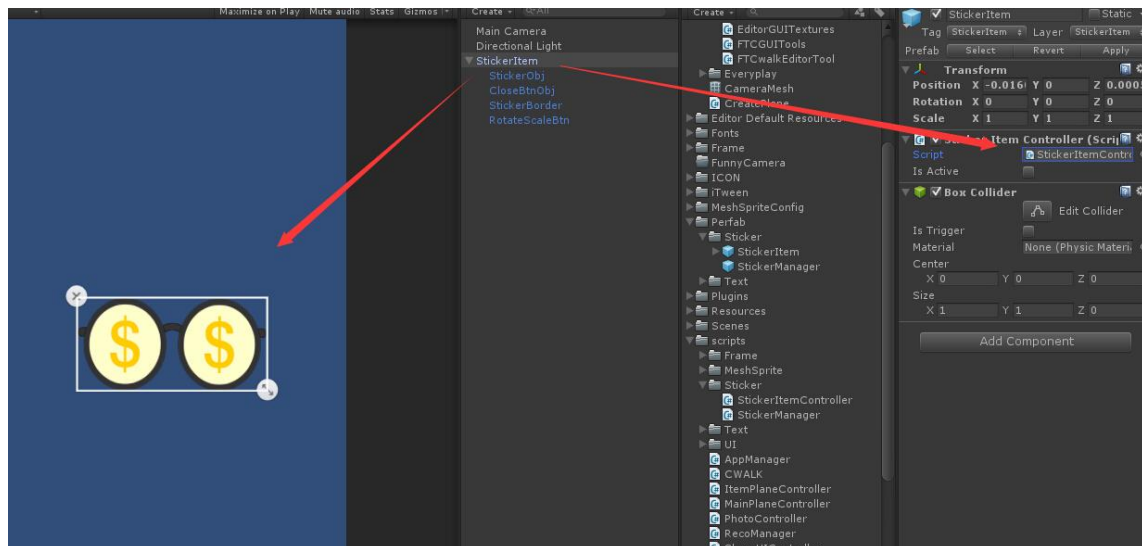
The prefab have four parts,all the parts is made by mesh ,So, **it works very efficiently.**

1),closebtn – when the user clicked the close btn it will destroy itself.

2) RotateScaleBtn – this btn can control the sticker scale and rotation. You can see

the specific source code in the project.

3) StickerBorder – this border is will show when the sticker is active.it is the meshsprite with nine_sliced type(has been introduced in the previous section).
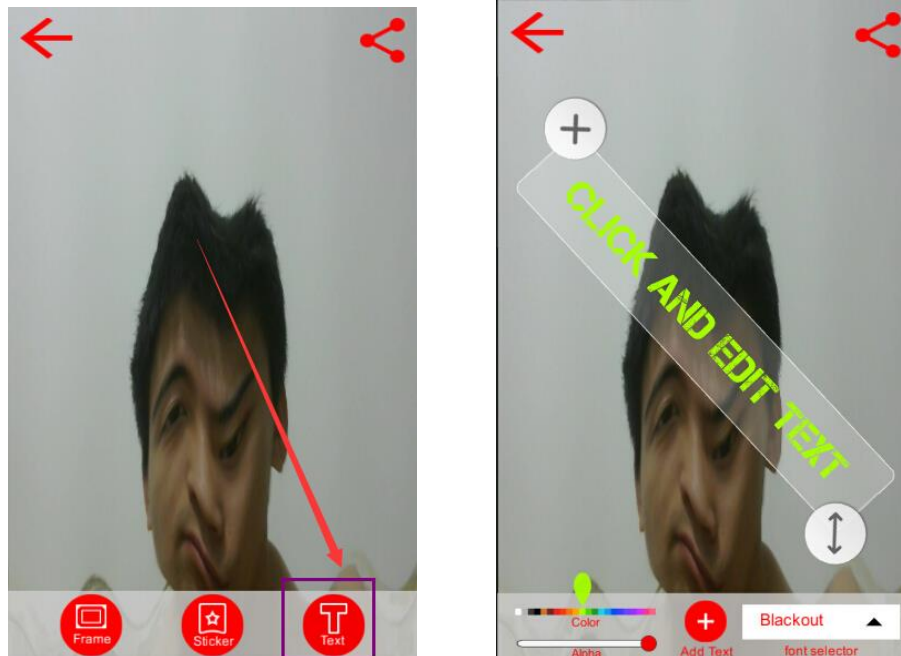

4) StickerObj – this is the sticker texture gameobject,it show the target sticker texture by StickerManager control.

(5)Text Manager

Compared to StickerManager, They have a lot in common feature. such as :touch move,scale,rotation,and so on. so we will share some other important feature.

1) **TextMesh Edit**

   The Text Part we use the TextMesh in unity,at the same time,we make the TextMesh Can edited in runtime. So the users of app can edit the text content they like.this feature fit on pc,android,ios.

   This feature is controlled by the script "TextMeshInput.cs",you can see it detail in the project.

2) **Font Settting**

   In the project ,we have provide about ten kinds of fonts to select,user can select the most beautiful one to apply on.

3) **Color Setting/ Alpha Setting**

   When users select the font ,they can change the text color by touch slide the color slider to select. Meanwhile,they can set the text alpha.

In the end, thank you for purchasing our project again.if you can any problem about our project ,please contact us by email.

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